



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,054	02/26/2002	Kevin J. Schulz	S01.12-0829/STL 10301	4383

7590 07/10/2002

Theodore M. Magee
WESTMAN CHAMPLIN & KELLY
International Centre - Suite 1600
900 South Second Avenue
Minneapolis, MN 55402-3319

EXAMINER

KLIMOWICZ, WILLIAM JOSEPH

ART UNIT	PAPER NUMBER
----------	--------------

2652

DATE MAILED: 07/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,054

Applicant(s)

SCHULZ ET AL. *W*

Examiner

William J. Klimowicz

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 3-5, 8-12, 14, 17-20, 22 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 7, 13, 15, 16, 21, 23 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 4. 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Claims 3-5, 8-12, 14, 17-20, 22 and 25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5 (filed June 18, 2002).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 7, 13, 15, 16, 21, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Oberg (US 4,991,045).

As per claim 1, Oberg (US 4,991,045) discloses a data storage device for storing and accessing data in tracks on a medium (*e.g.*, see COL. 1, lines 5-15), the storage device having a suspension (100) comprising: a metal material (128) defining at least a portion of the suspension (100); an adhesive (ultrasonically/heat staked plastic which is plastic that is melted to form a bond; *e.g.*, see, *inter alia*, COL. 5, lines 4-8) bonded to a portion of the metal material (128); and a composite material (106) having a higher stiffness to weight ratio than the metal material (due to its composition, which includes a liquid crystal polymer - see COL. 4, lines 23-47) and being

Art Unit: 2652

bonded to the adhesive (ultrasonically/heat staked plastic which is plastic that is melted to form a bond; *e.g.*, see, *inter alia*, COL. 5, lines 4-8, and wherein that bond is integrated with the composite material (106)).

As per claim 2, the metal material defines a load beam (128) of the suspension (100) and the adhesive (ultrasonically/heat staked plastic which is plastic that is melted to form a bond; *e.g.*, see, *inter alia*, COL. 5, lines 4-8) and the composite material (106) are positioned on the load beam.

As per claims 6 and 16, the composite material (106) comprises a high performance plastic and as per claim 7, the composite material (106) comprises a liquid crystal polymer (see COL. 4, lines 23-47).

Additionally, as per claim 13, the suspension body is formed from a layer of metal (128); and a composite stiffener (106) formed from a composite material (see COL. 4, lines 23-47) and bonded to a portion of the suspension body (ultrasonically/heat staked plastic which is plastic that is melted to form a bond; *e.g.*, see, *inter alia*, COL. 5, lines 4-8, and wherein that bond is integrated with the composite material (106)).

As per claim 15, the composite stiffener is bonded to a load beam (128) of the suspension body (100).

Additionally, as per claim 21, the suspension body (128) formed from a layer of metal (128); and stiffener means (106) formed of a composite (see COL. 4, lines 23-47) material for increasing the stiffness of selected areas of the suspension.

As per claim 23, the stiffener means (106) comprises a composite material bonded to a load beam of the suspension body ((ultrasonically/heat staked plastic which is plastic that is

Art Unit: 2652

melted to form a bond; *e.g.*, see, *inter alia*, COL. 5, lines 4-8, and wherein that bond is integrated with the composite material (106)).

As per claim 24, the stiffener means comprises a composite material having a higher stiffness to mass ratio than the layer of metal (due to its composition, which includes a liquid crystal polymer - see COL. 4, lines 23-47).

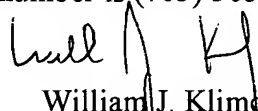
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (703) 305-3452. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


William J. Klimowicz
Primary Examiner
Art Unit 2652

WJK
July 3, 2002